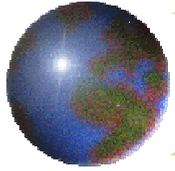


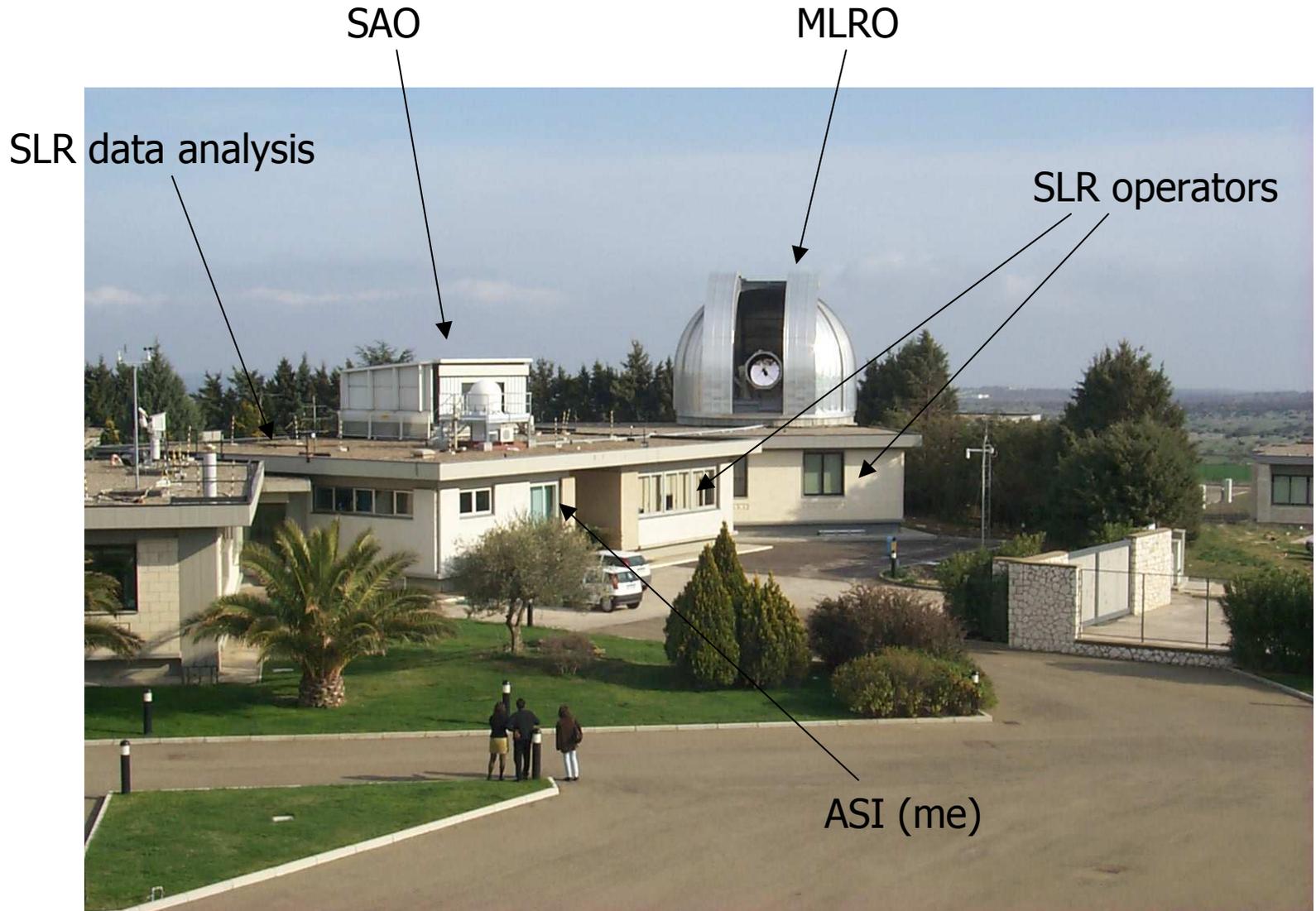
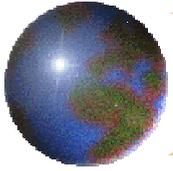
*Working together: the MLRO
experience*

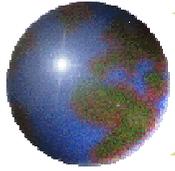
G. Bianco, V. Luceri, G. Nicoletti



SLR people at CGS

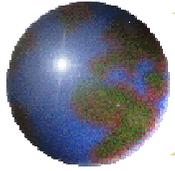
- SLR operators (Telespazio/e-GEOS)
- SLR data analysis (Telespazio/e-GEOS)
- SLR system engineering (Telespazio/e-GEOS)
- Program management (ASI)





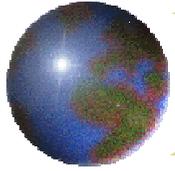
Advantages

- Multiple competences available at the site
- Faster/more efficient than public organizations (that's what they say)



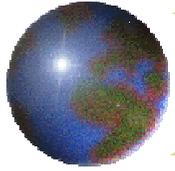
Issues so far

- ⊕ Motivational
- ⊕ Distribution of competences
- ⊕ Results may depend on contractual wording
- ⊕ Difficulties in translating “good SLR” in a statement of work
- ⊕ Difficulties in keeping the best people on the program
- ⊕ Cost



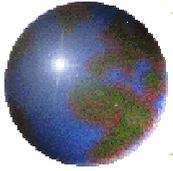
What should an operator know?

- You're not a post office employee 😊
- Calibration is everything
- Large bias is much worse than large residuals rms
- Calibration results (event timer, peak detector) must be well understood and interpreted

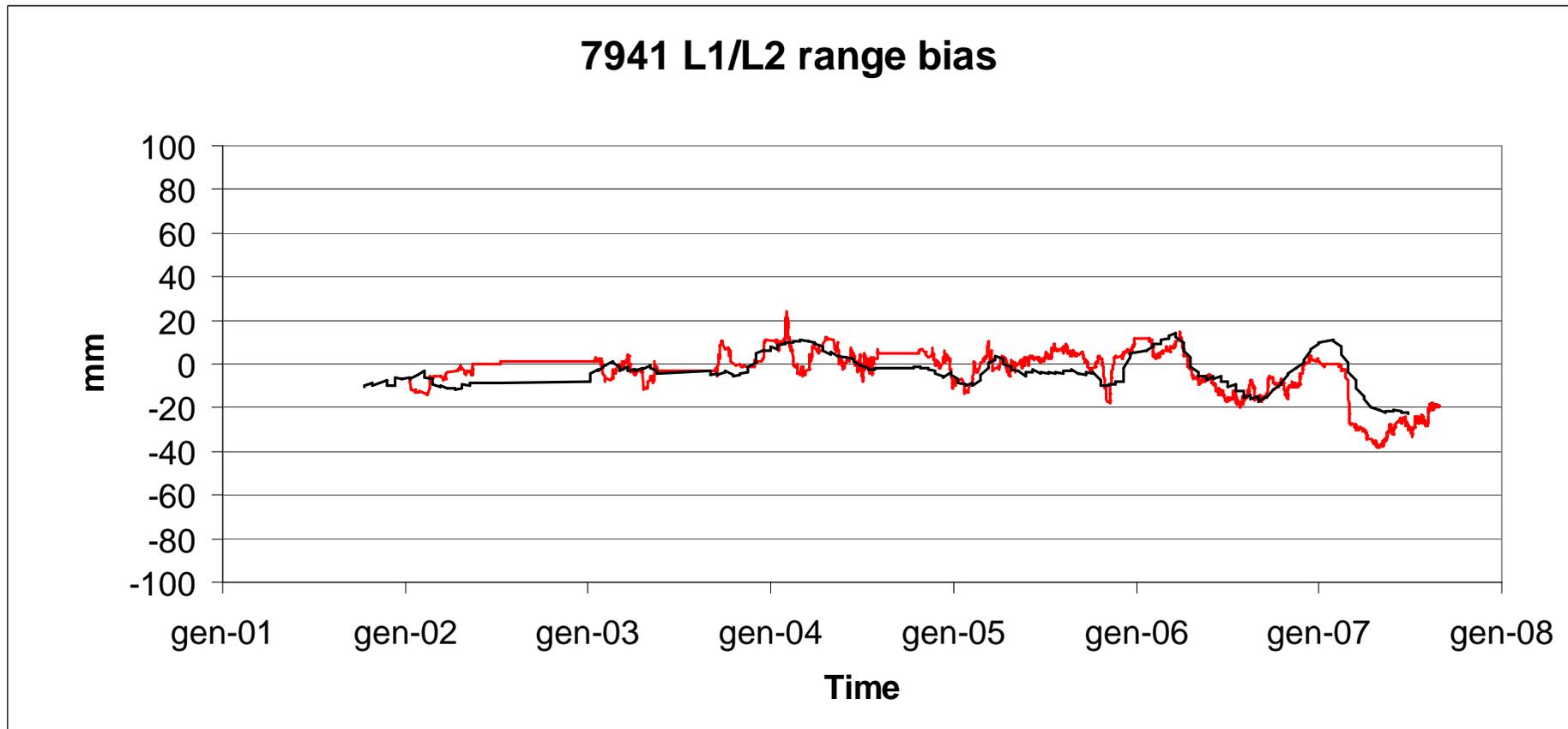


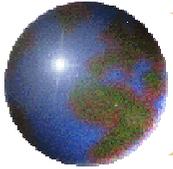
What should a data analyst know?

- ⊕ What the hell is this *peak detector*?
- ⊕ Changed the PMT, so what?
- ⊕ How is a calibration done and applied?

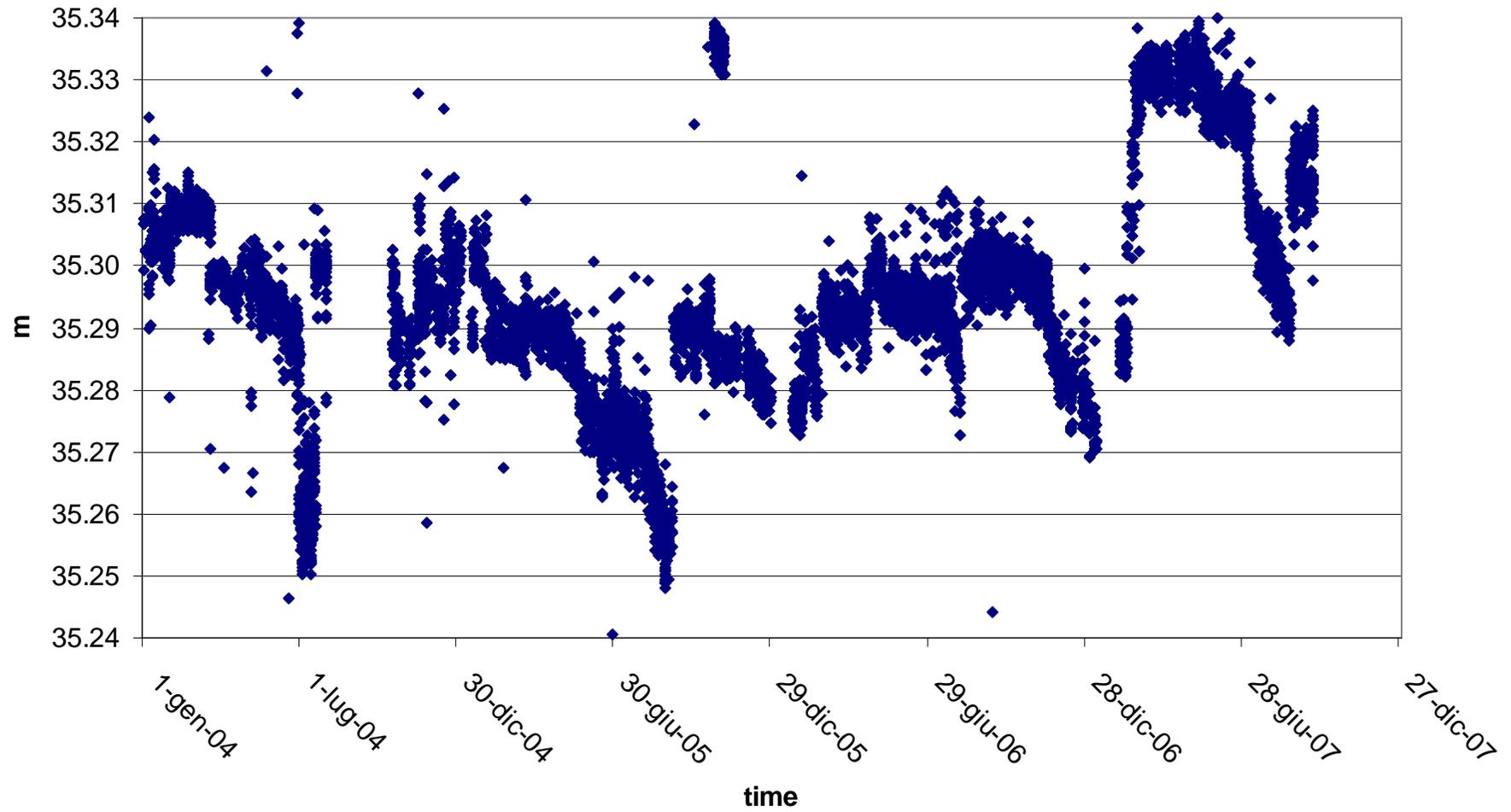


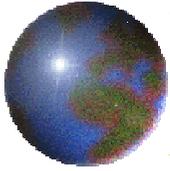
Real life example:



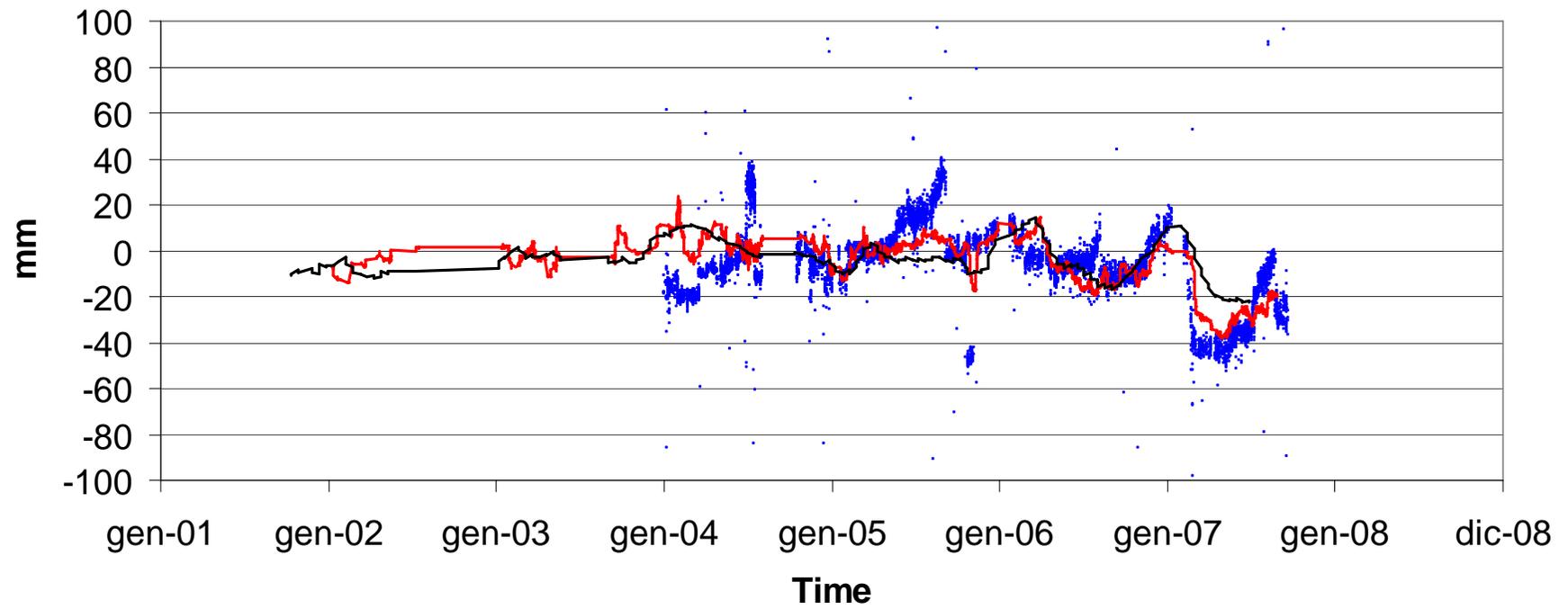


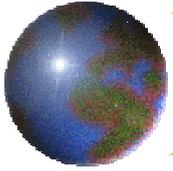
7941 1-way system delay





7941 L1/L2 range bias vs system delay





Conclusion, and question marks

- ❖ A *dedicated* SLR system engineer is mandatory.
- ❖ A set of *quasi real-time SLR station health indicators* should be agreed upon, defined and developed by system specialists and data analysts. This should allow to rapidly pinpoint a problem arising at a station
- ❖ Is range bias monitoring enough?
- ❖ Standardizing calibration procedures?